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PCT/FR2003/002180

PATENT COOPERATION TREATY

PCT 10/527197

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Translation
REPLACED BY
ART 34 AMDT

Applicant's or agent's file reference VALS 865 B PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/FR2003/002180	International filing date (day/month/year) 10 juillet 2003 (10.07.2003)	Priority date (day/month/year) 10 septembre 2002 (10.09.2002)
International Patent Classification (IPC) or national classification and IPC A61M 15/00		
Applicant VALOIS SAS		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.

- This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 08 avril 2004 (08.04.2004)	Date of completion of this report 25 November 2004 (25.11.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

Form PCT/IPEA/409 (cover sheet) (July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FR2003/002180

I. Basis of the report

1. With regard to the elements of the international application:*

☒ the international application as originally filed

☒ the description:
 pages 1-7, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

☒ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 1-15, filed with the letter of 08 October 2004 (08.10.2004)

☒ the drawings:
 pages 1/3-3/3, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
☐ the claims, Nos. _____
☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/FR 03/02180

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1.	Statement				YES
	Novelty (N)	Claims			
		Claims	1, 2, 9, 11, 13-15		NO
	Inventive step (IS)	Claims			YES
		Claims	1-15		NO
	Industrial applicability (IA)	Claims	1-15		YES
		Claims			NO

2. Citations and explanations

V

1. The dispenser of document D2 (WO-A-02/49 569) comprises a valve body 1 and a valve 7 sliding between a rest position and a dispensing position; said valve is made in two portions, an outer portion extending partially outside the valve body 1 and an inner portion sliding inside the valve body; said two portions are fastened together and each may be made of a metal, i.e. a thermally conductive material (see in particular figure 1, claim 8 and pages 28 and 29 of the description of D2). The fact that the material forming the outer portion of the valve is thermally conductive is sufficient for it to constitute thermal control means for restricting the cooling of the valve when fluid is dispensed, within the meaning defined in claim 1 of the application in question.

The dispenser of D1 (WO-A-01/89 616) is similar to that of D2.

Within the meaning of PCT Article 33(2), the subject matter of claim 1 is therefore not novel over D1 or

D2.

2. The features of claims 2, 9, 11 and 13 to 15 are known especially from D2. The fins of claims 3 to 8 are known *per se* in the technical field of dispensers, as can be seen from D3 (JP-A-53 096 516) and D10 (WO-A-01/96 210) in particular, and the production thereof is obvious to a person skilled in the art seeking to improve the thermal control means. The features of remaining claims 10 and 12 are unremarkable and devoid of an inventive step.

The subject matter of claims 2 to 15 is therefore neither novel nor inventive within the meaning of PCT Article 33(2) and (3).

VII

The description should cite and briefly present the most relevant documents and be made consistent with any new claims (PCT Rule 5.1(a)(ii) and (iii)).

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CLAIMS

1. A fluid-dispenser valve (10) comprising a valve body (11), and a valve member (12) slidable in said valve body (11) between a rest position and a dispensing position, said valve (10) being characterized in that it includes temperature regulator means (12, 20) for limiting cooling of the valve member (12) while the fluid is being dispensed, said temperature regulator means comprising a valve member (12) made, at least in part, of a thermally-conductive material, and said valve member (12) including an inner portion, slidable inside the valve body (11), and made of a first material, and an outer portion, extending, at least in part, outside the valve body, and made of a second material that is thermally conductive, said inner and outer portions being secured to each other, in particular by overmolding.
2. A valve according to claim 1, in which said temperature regulator means further comprise a head (30) co-operating with said valve member (12), said head (30) being made of a thermally-conductive material.
3. A valve according to any preceding claim, in which said temperature regulator means further comprise cooling plates (20) co-operating with said valve member (12).
4. A valve according to claim 3, in which said plates (20) are disposed around said valve member (12).
5. A valve according to claim 3, in which said plates (20) are disposed in a head (30) co-operating with said valve member (12).
6. A valve according to any one of claims 3 to 5, in which said plates (20) extend approximately parallel to one another, and substantially transversely to the central axis of said valve member (12).

CORRECTED SHEET

7. A valve according to any one of claims 3 to 6, in which said plates (20) are made of a thermally-conductive material.

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8. A valve according to any preceding claim, in which said thermally-conductive material is a metal, in particular aluminum.

10 9. A valve according to any preceding claim, operating with a propellant gas so as to dispense the fluid.

15 10. A valve according to claim 9, in which said propellant gas comprises gases of the HFA-134a or HFA-227 type.

20 11. A valve according to any preceding claim, in which said valve (10) is a metering valve, said valve body (11) including a valve chamber (15) defining a volume of fluid to be dispensed each time the valve (10) is actuated.

25 12. A valve according to claim 11, in which said volume of fluid dispensed at each actuation is greater than 500 μ l.

30 13. A fluid dispenser device comprising a fluid reservoir (1), said device being characterized in that it further comprises a valve (10) according to any one of claims 1 to 12.

14. A device according to claim 13, including a dispenser head (30) mounted on the valve member (12) of said valve (10).

35 15. A device according to claim 14, in which said dispenser head (30), and in particular the portion (31)

CORRECTED SHEET

This translation of an amended page covers the amendments made in the original. However, the page breaks match the translation, so that this page is also a replacement page that fits in with the remainder of the translation.

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co-operating with the valve member (12), includes said temperature regulator means (20).

CORRECTED SHEET

This translation of an amended page covers the amendments made in the original. However, the page breaks match the translation, so that this page is also a replacement page that fits in with the remainder of the translation.